

ABSTRACT

A screw-type kneading/extruding machine is constructed such that a screw (3) that is positioned in correspondence with a vent opening (4) formed in a cylinder (2) has a screw piece (10) with surface-renewing ability. Accordingly, as the thermoplastic synthetic resin material is kneaded, the inner portion of the thermoplastic synthetic resin material and its surface layer portion are constantly interchanged to thereby renew the surface portion, and air bubbles of the volatile components successively develop near the renewed surface and then burst, so the volatile components are discharged. At the position of the vent opening (4), the thermoplastic synthetic resin material undergoes strong agitation by the screw piece (10). Accordingly, the renewal of the surface portion is performed more frequently so that the volatile components are discharged in large quantities. The volatile components discharged from the burst air bubbles are exhausted from the vent opening (4). The structure enables deaeration without involving temperature rise and quality deterioration of a raw material.